YB500 OWNER'S MANUAL

HOW TO USE
YOUR GRUNDIG

YB500 AM/FM/SW Radio

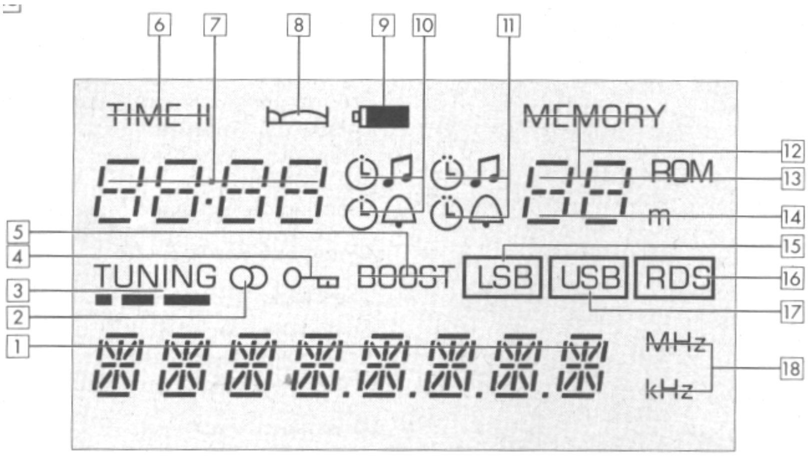
NEED HELP? HERE'S HOW TO CONTACT US:

- **From the United States: 1-800-872-2228**
- **From Canada: 1-800-637-1648**
- **From everywhere else: 650-903-3866**
- **e-mail: grundig@ix.netcom.com**
- **World Wide Web: www.grundigradio.com**
- **Eton Corporation/Grundig**
  1015 Corporation Way
  Palo Alto, California 94303
  United States

Contents

Yacht Boy 500 - LC DATA MONITOR (Display)

Indication(1)-(18)



1 8-digit alphanumeric display for
- Station name
  Appears automatically when receiving an FM (VHF) station which is transmitting RDS (Radio Data System) signals. For other stations, you can enter a name of your choice.
- *LW* (Longwave), *MW* (Mediumwave), SW (Shortwave), and *FM* (VHF) : waveband, frequency.
- Programming functions
  e.g., △ *MENU* ▽ , *ON 1, OFF 1,* etc.
- Hints (marked by ∗)
  e.g., ∗ *LOCKED, ;* ∗ *NO RDS, Q* - - (RDS quality), etc.
- Error messages (marked by ∗∗) e.g.,
  e.g., ∗∗ *MEMORY,* ∗∗ *FREQ,* etc.
- Automatic switch-on times.

2 (FM stereo reception).

3 TUNING (field strength indication)

4 (Key-protect= key locking).

5 BOOST (increased output power).

6 *TIME I1/TIME II* (related to the indication).

7 - Clock times (TIME I/TIME II), SLEEP time (go-to-sleep time), alarm times.

8
- one SLEEP time (go-to-sleep time) is programmed. - SNOOZE (alarm interrupt) is activated.

9 (battery check)

10 Symbols for alarm modes (wake-up by radio programme or alarm sound signal alarm time 1).

11 Symbols for alarm modes (wake-up by radio programme or alarm sound signal alarm time 2).

12 1 - 40 MEMORY (number of station memory location).

13 1 - 9 ROM (ROM table is selected).

14 SW-Meter-Band
AS (AUTO SEARCH) = Automatic Station search.
0 = Tuning memory.
AF = RDS Alternative Frequency.

15 LSB (Lower Side Band):
Lower side bond on SSB reception.
SSB = Single Side Band.

16 RDS (Radio Data System): You are receiving an FM station broadcasting RDS signals.

17 USB (Upper Side Band)
Upper side band on SSB reception.

18 MHz - kHz (frequency)
In *MHz* on FM (VHF), in *kHz* on AM (LW, MW, SW).

Your Unit at a Glance

(1) Illumination Button (LIGHT)
- For switching on the display illumination on battery operation (permanent illumination on AC (mains) operation).

(2) SNOOZE Button
- To interrupt (press briefly) and switch off (longer pressure) the sound signal during the alarm function.

(3) Telescopic Aerial/Antenna
- For FM (VHF) and SW reception.
- Can be extended and swivelled.

(4)LC DATA MONITOR (Display)

(5) Numeric Buttons 0 ... 9
- For all numeric entries.
- Press 0/ROM button a longer time:
Passage from the ROM table to the normal memory level and back again, with tansfer into the tuning memory.

(6)MEMORY Button
-For calling up the station memory locations 1 ... 40 (enter with the numeric buttons 0 ... 9).
- For calling up the tuning memory 0.
- For calling up the ROM table 01 ... 09. Memory-Scan
Press briefly: To step to higher memory location numbers;
Press a longer time: To step back to lower memory location numbers.

(7)Volume Control (VOLUME)

(8)CLEAR Button Press briefly:
- To clear wrong entries.
- To quit the menu functions.
- To abort entry of abbreviations. Press a very long time:
- To clear an occupied station memory location.

(9)Swing-out Support
in the rear of the unit.
- To bring the unit into a tilted position convenient for operation.

(10) Battery Compartment
in the rear of the unit.

(11)On/Off Button (ON/OFF)
combined with the locking switch (LOCK/UNLOCK).

(12)Fine Tuning Control (FINE TUNING)
for AM (MW, LW, SW) and SSB reception.

(13) (Key-protect = locks keys when unit is switched on.)
- This prevents an indadvertent use of the function keys.
- Switching off is possible: set switch j to "LOCK".

(14) SLEEP Button (go-to-sleep button)
- For entering a period of time of up to 60 minutes in steps of 10 minutes, after which the radio switches off.

(15) FM/RDS-AF Button
- For selecting the FM (VHF) band.
You will hear the FM station last tuned to (Last Station Memory).
- For concluding a manual frequency entry.
- For calling up the AF = Alternative Frequencies which can be received via RDS (Radio Data System) when this band is already selected.
Press briefly = AF forward,
press a longer time = AF backward.

(16) TIME I/II
- To switch between time zone I and time zone II.
- To transfer a manually entered time into the actual time zone.
- To conclude a switching time I or II entry.

(17) AM Button
Press briefly:
- To select an AM band (LW, MW, SW).
Further pressures on this button will step through the AM bands in the order LW -* MW - SW -> LW -* MW, etc.
You will hear the station last tuned to in the respective AM band.
- For concluding a manual frequency entry.
- For concluding a manual band entry.
Press a longer time
- On SW, stepping to the lower band limit of the following meter band as long as this button is kept pressed.

(18) AUTO Button
- For enabling and disabling the automatic functions after having set the alarm mode, the switching times and the station memory.

(19) TUNE △/TUNE ▽
On FM:
Press briefly:
- Frequency tuning in the 25 kHz mode.
Press a longer time:
- Station search in the 100 kHz mode.
TUNE△= to higher frequencies.
TUNE▽=to lower frequencies.

On MW and LW:
Press briefly:
- Frequency tuning in the 1 kHz mode.
Press a longer time:
- Frequency tuning in the 9 kHz mode.
On MW, the Menu allows you to switch to the 10 kHz raster (USA mode).
Press a very long time:
Automatic frequency scan.

On SW:
Press briefly:
- Frequency tuning in the 1 kHz mode.
Press a longer time:
- Frequency tuning within a meter band in the 5 kHz mode.
Press a very long time:
Automatic frequency scan.

(20) MODE Button
Press briefly:
- To temporarily switch from name indication to frequency indication.
On SW, additional indication of the meter band.
Press a longer time:
- To call up the menu.

(21) MONO/ROM-AF Button -
-Mono/stereo switching.
-To call up alternative frequencies with the "ROM table" selected.

(22)LSB/USB Button

- To select the lower or upper side band on SSB (Single iSide Band) reception.

Stepping button, steps forward in the order:
With reception frequency < 10 MHz = LSB → USB → Normal → LSB, etc.
With reception frequency ≥10 MHz = USB → LSB → Normal → USB, etc.
LSB = Lower Side Band;
USB = Upper Side Band.
On FM:
Keep pressed button = indication of the RDS quality

(23) STORE Button

- For storing the displayed frequency or the station name and the selected reception mode (e.g., Mc Stereo, LSB/USB) into one of the station memory locations 1 ... 40.

Press briefly: Store compare.
- Indication whether the frequency tuned to has ready been stored (e.g., ∗*MEMO 3 ... MEMO5 … MEMO8 ...).*
- Further pressures on the button or keeping it press indicates whether the respective frequency is stored several times and, if so, on which location numbers.
- If the frequency is not yet stored, the display (4) indicate ∗ *NEW.*

Press a longer time:
- Indication *of all* free *memory* locations (e.g., ∗ *FREE 6 ... FREE 8 ... FREE 25 ...).*

(24) A - Z Button

- To enter the abbreviation for the currently selected station memory location.

(25) SOUND (NORMAL -BOOST)

not on headphone operation.
NORMAL = normal output power
(low-current drain on battery operation);
BOOST= the output power is more than doubled(recommended on mains unit operation).

(26)TONE (MUSIC - SPEECH)

MUSIC = normal reproduction;
SPEECH = speech reproduction.

(27) Headphone Jack (Ω)

- For stereo headphones with 3.5 mm jack plug and an impedance of 32-2000Ω.
FM stereo reception is only possible with a headphone. When connecting a headphone, the built-in loud-speaker is automatically disconnected.

(28) 3.5 mm Output Socket (LINE OUT)

- High-level output for making recordings.

(29) 3.5 mm Output Switch Jack ( )

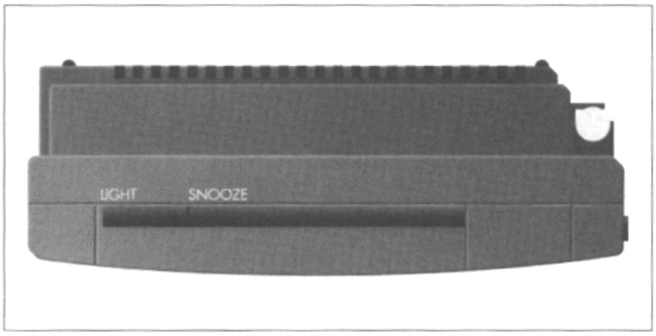
- For controlling external units (e.g., a tape deck).

(30) 3.5 mm Coaxial Socket (DC IN 9V)

- For connecting the mains unit accompanying the unit (AC adapter NR 90-1).

Aerials

for all wavebands



Telescopic aerial(3)
for FM and SW reception.

- When the aerial base is completely pulled out, the telescopic aerial can be tilted and rotated into different positions.
- For SW reception, fully extend the aerial and place it vertically.

Due to the much more better propagation conditions during the evening and night hours, there may be interferences during these hours.

- These interferences can be reduced by partially pushing in the telescopic aerial.

Please note
Touching the telescopic antenna reduces FM and SW reception quality.

Ferrite aerial
for MW and LW reception (built-in).

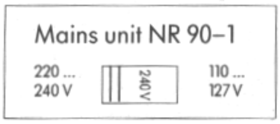
- Turn the unit about its vertical axis to find the best reception position.

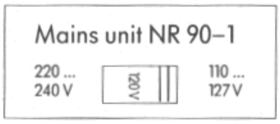
Power Supply

AC (Mains) Operation

- Only use the supplied AC (mains) unit NR 90-1 for the set.
- Adjust the local mains voltage on the AC (mains) unit.

220... 240V   110... 127V



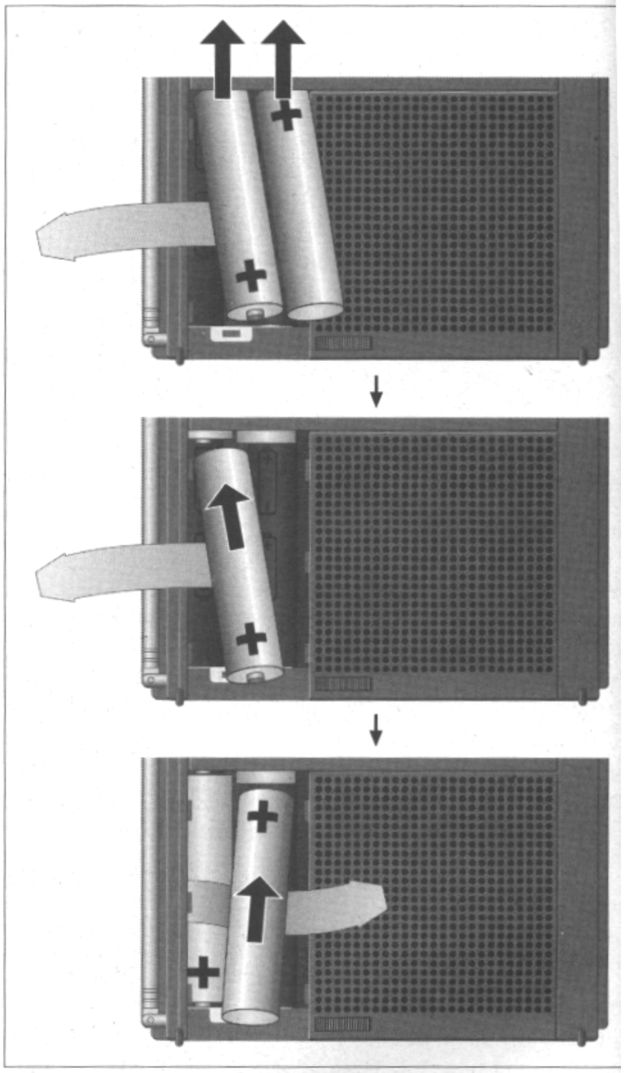


- Connect the mains unit to the DC IN 9 V socket(30) (30). This automatically disconnects the inserted batteries.
  - No responsibility can be accepted for damage due to operation with the voltage selector set to the wrong position.
- Remove the batteries if the unit is to be operated permanently on the mains!

Battery Operation

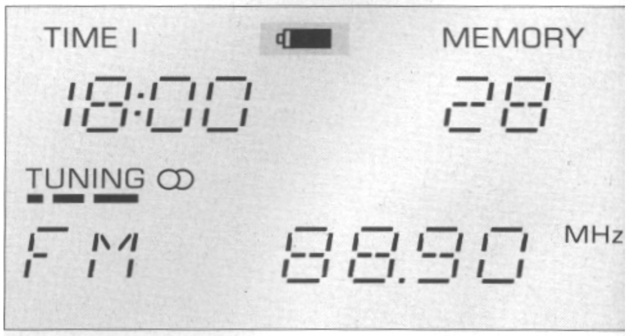
With four 1.5 V batteries, type IEC LR 6 or AA.
We recommend the use of alkaline-manganese batteries with low mercury constituent or no mercury at all.

- Disconnect the plug of the AC (mains) unit from the DC IN 9 V socket (30).
- Open the cover of the battery compartment (10) (on back of unit).
- Insert the batteries with correct polarity (see scheme on bottom of battery compartment).
- For this, observe the order of the batteries and the position of the take-out ribbon (see Fig. to the right)



Battery Check

When the batteries get weak, a battery symbol ( ) will appear in the display (4).



Attention

- Remove exhausted batteries immediately from the unit!
- If the unit is not to be used for longer periods, remove batteries even if they are new!
- No responsibility can be accepted for damage due to leaking batteries.

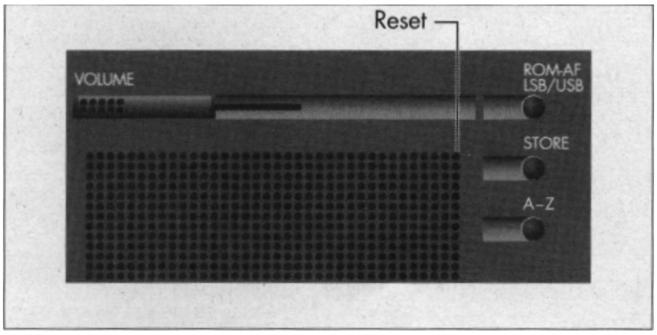
Note on environmental protection
Do not throw exhausted batteries in the houshold waste !
Hand over the old batteries to your radio dealer or a public collecting point when buying new ones.

Data Protection

(Mains and Battery Operation)

- When the power supply is disconnected, the time and the last station memory are retained for approx. 5 minutes.

Reset Button



If, due to external interferences (caused by static charges of carpets, thunderstorms, etc.), the control electronics of your Yacht Boy 500 should receive wrong information signals, or if no entries at all are possible, then press the Reset button.
This is to be found behind the top right opening in the decorative speaker grill.
For pushing the switch, it is best to use a bent-up paper clip.
By releasing the Reset impulse, the unit is reset to its initial programming state.
The contents of the individual station memory locations are not affected.
However the time setting and the contents of the last station memory will be cleared.
The stored stations and menu options will not be lost neither by a power supply failure nor by a Reset.

User Guide Via the Menu

With the unit switched on, call up the menu by pressing the MODE button (press a longer time).
 Use the buttons TUNE △ and TUNE ▽ to select one after the other the different menu options:
Switch-on time ON 1- switch-off time OFF 1 -
Switch-on time ON 2 - switch-off time OFF 2 -
iDisplay brightness - LAMP 0 ... 4 -
Sound signal intensity BEEP 0 ...4 -
MW raster frequency 9 kHz or 10 kHz.

You can quit the menu ...

- by pressing the CLEAR button,
- automatically 60 seconds after completion of the 1 entry,
- by pressing the MODE button when the display sho *△MENU▽.*

Key	MENU items	Key	Description
	Δ MENU ∇		Operator´s guide to menu is activated
TUNE Δ	ON 1	0 . . . 9 + TIME I / II	Enter turn on time1 and confirm with TIME I / II key
		0 . . . 9 + MEMORY	Select station-memory and confirm with MEMORY key
		MODE	Keep the MODE key depressed to select alarm mode: 🔔 / ♫ / 🔔 + ♫ / OFF / 🔔 . . .
TUNE Δ	OFF 1	0 . . . 9 + TIME I / II	Enter turn off time1 and confirm with TIME I / II key; not necessary when set for alarm mode 🔔
TUNE Δ	ON 2	0 . . . 9 + TIME I / II	Enter turn on time 2 and confirm with TIME I / II key
		0 . . . 9 + MEMORY	Select station-memory and confirm with MEMORY key
		MODE	Keep the MODE key depressed to select alarm mode: 🔔 / ♫ / 🔔 + ♫ / OFF / 🔔 . . .
TUNE Δ	OFF 2	0 . . . 9 + TIME I / II	Enter turn off time 2 and confirm with TIME I / II key; not necessary when set for alarm mode 🔔
TUNE Δ	LAMP "4 . . . 0"	MODE	Keep MODE key depressed to select display brightness: (when line-operated) 4, 3, 2, 1, 0, 4, 3, . . . Is mute when entering
TUNE Δ	BEEP "4 . . . 0"	MODE	Keep MODE key depressed to select acoustic signal volun 4, 3, 2, 1, 0, 4, 3, . . .
TUNE Δ	MW "9 or10 kHz"	MODE	Keep MODE key depressed to select MW-raster: 9 kHz / 10 kHz
TUNE Δ	MENU	MODE	Concludes the operator´s guide

CLEAR allows you to exit the menu at any time!

General Operation

For convenient operation, your Yacht Boy can be brought into a tilted position by the swing-out stand provided at its rear.

- The type plate is to be found below-this stand.
- To switch the unit on or off, press the ON/OFF button (locking switch (11) in "UNLOCK" position).

Key-protect

- By pressing the button (13) (indication in the display (4)), it is possible to "lock" the function buttons on the front panel when the unit is switched on, thus preventing an inadvertent use of these buttons.
- Press once again on the button to "unlock" the function keys.

LOCKED

- To protect the unit against inadvertent switching on during transportation, set the switch (11) to "LOCK". (Indication *I LOCKED* in the display (4)).

This disables all functions of the unit, such as the alarm function.

However, the function settings are retained.

- To clear the "LOCKED function", set the switch (11) to "UNLOCK". The indication ∗ *LOCKED* must disappear.

Direct Entries

- You can enter all numeric values with the numeric buttons (5) Frequencies, station memory locations (programming or calling up), SW meter bands, clock times and switching times.

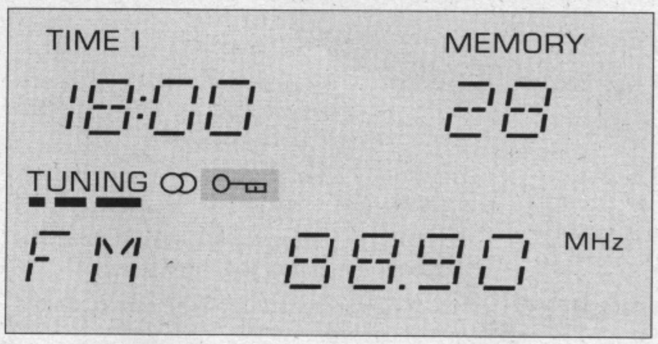
You dispose of approx. 60 seconds for each entry step. If you exceed this period of time, you are obliged to restart.

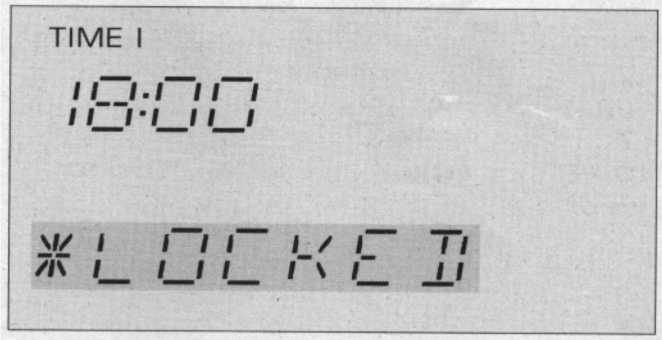
When operating the unit via the menu, the unit switches automatically to radio operation approx. 60 seconds after having made the last entry.

- You must always conclude (confirm) your entries with one of the following buttons: FM/RDS-AF, AM, STORE, MEMORY and TIME I/TIME II.
- To immediately correct a bad entry which is not yet confirmed, press the CLEAR button (8).
- If you make a wrong entry or an operating error, a hint or an error message will appear for approx. 2 seconds in the display (4) after having concluded the respective entry or operation.

In addition, the unit emits a beep.

If you wish to switch off the beep or change its volume, follow the "User Guide Via the Menu", page 38.





Defintion of times you must press the buttons
Longer = 300 ms
Long = 500 ms
Very long = 2 s (the function will be confirmed by a beep).

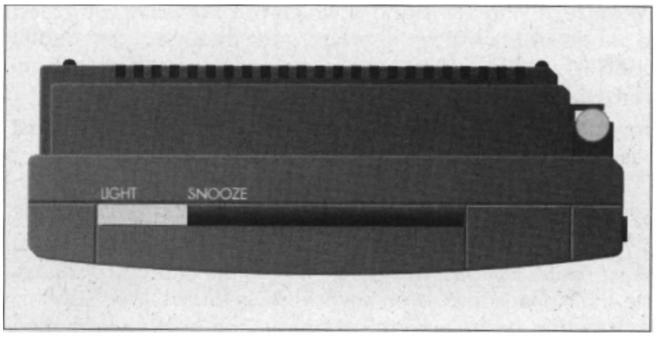
Hints and Error Messages in the Display (4)

Hints (marked by ∗) Error Messages (marked by ∗∗)

∗ *RDS*	Entry of abbreviations disabled.	∗∗ *TIMER*	No automatic function possible without entry of alarm mode.
∗ *NO RDS*	The station is not broadcasting RDS signals, or the received signal strength does not meet the RDS requirements.	∗∗ *TIME*	Clock or switching times not correctly entered.
∗ *NO AF*	The station is not broadcasting alternative frequencies.	∗∗ *FREQ*	Frequency not correctly entered
∗*MEMO- -*	The current frequency is already stored in the station memory location - - .	∗∗ *M - BAND*	*SW* -m-band not correctly entered.
∗ *NO MEMO*	No or no further station memory locations are occupied.	∗∗ *MEMORY*	Station memory location not correctly entered.
∗ *NEW*	The current frequency is not yet stored	∗∗ *ROM TAB*	With the ROM table being selected, the "STORE" button has no function.
∗ *FREE - -*	The selected station memory location - - is not occupied.		
∗ *FULL*	*All* locations of the station memory are occupied.		
∗ *LOCKED*	The locking switch is set to "LOCKED".		
∗ *KEY*	*All* buttons are protected by "Key-protect".		

Display Illumination

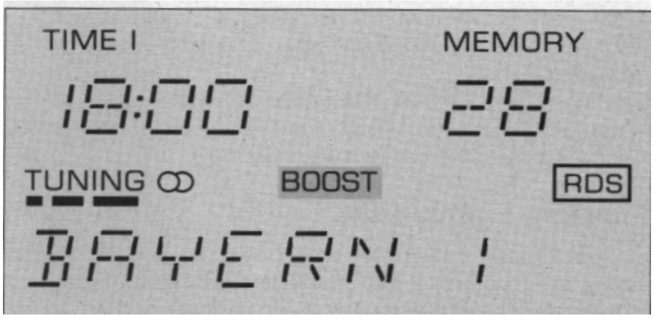
On battery operation, you can switch on the illumination for approx. 15 seconds by pressing the LIGHT button (1). When actuating buttons on the set ("operations"), this period will be prolonged.
You can immediately switch off the illumination again by pressing the LIGHT button (1) once again.



- On AC (mains) operation (unit "on"), you have the choice between switched on or switched off illumination.
- On AC (mains) operation (unit "off"), you can select the desired degree of brightness. (See "User Guide Via the Menu").

On AC (mains) operation, it is possible to temporarily switch on the illumination as on battery operation when the permanent illumination is switched off.

The Volume

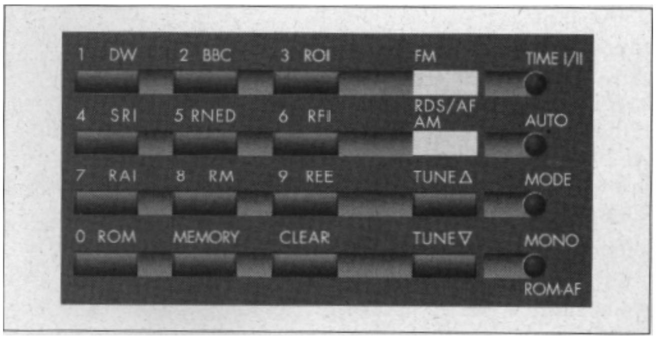


- can be adjusted with the VOLUME slider control (7).
- SOUND switch (25) set to BOOST
  (indication in display (4))
  The output power is more than doubled.
  Because of the higher current drain, this mode is only recommended during AC (mains) operation.

The Tone

- can be adjusted with the TONE switch (26) to suit your taste:
  MUSIC = normal reproduction;
  SPEECH = speech reproduction.

Waveband Selection



When switching the set on with the ON/OFF button, it is ready for reception and you will hear the station last tuned to.

FM
The FM band is selected with the FM/RDS-AF button.

AM
The AM band is selected with the AM button.
- The first pressure on the AM button selects the station last tuned to in the AM band.
- Each further pressure on this button steps through the AM bands in the order
  LW → MW → SW → LW → MW → ,etc.,
and selects the station last tuned to in the respective band.

ROM Table of the Yacht Boy 500

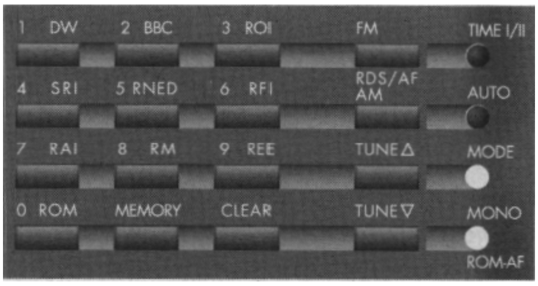
When receiving FM stations which are normally supposed to service relatively small areas, you can expect an equally good reception quality all over the day. With some restrictions, this applies also for local LW and MW stations.
When receiving SW stations, the signal has covered in most cases very long distances.
Due to physical laws, the same constantly good reception quality as known from local reception can thus not be guaranteed for SW reception.
Most radio stations which operate with SW are broadcasting their programmes on several frequencies. Through this distribution onto several SW bands, the best propagation conditions during the different times of day and even during different seasons are used.
To offer you a most convenient operation also when receiving on the SW bands, your GRUNDIG Yacht Boy 500 has been provided with a memory containing a ROM table (ROM = READ ONLY MEMORY), into which 90 frequencies of 9 radio stations which are operating all over the world are stored.
If you wish (press the MODE button (20)), the display will indicate the frequency currently tuned to (see list) beside the country sign and the station abbreviation.

Selecting Frequencies

For the table, frequencies have been selected on which mainly programmes in the respective national languages, but also service programmes for foreigners in the corresponding language (partly also in German) are broadcasted.
Despite of the up most care taken over the selection of the frequencies, it may happen, when calling up a memory location, that ...
a) you hear a different station than that indicated in the display,
b) you hear only disturbing noise.
In the first case, the cause is to be found in the multiple use of certain frequencies.
In the second case, there are several causes possible. For example, that...
- the station concerned is currently not broadcasting on this frequency,
- the station has temporarily exchanged this frequency with another frequency, or
- the current reception conditions for the area concerned are very bad

.

In such cases, it is recommended to call up (interrogate) all alternative frequencies stored for the station concerned (for this, use the MONO/ROM-AF button (21)).

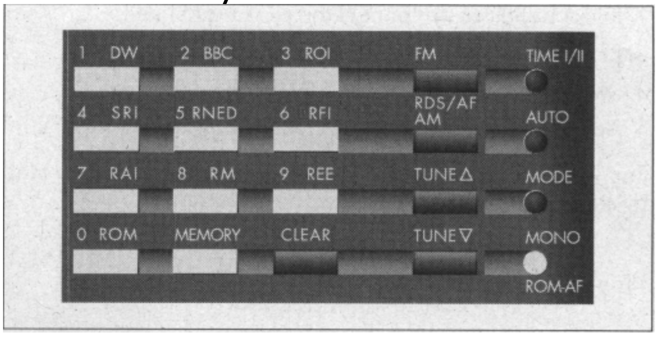


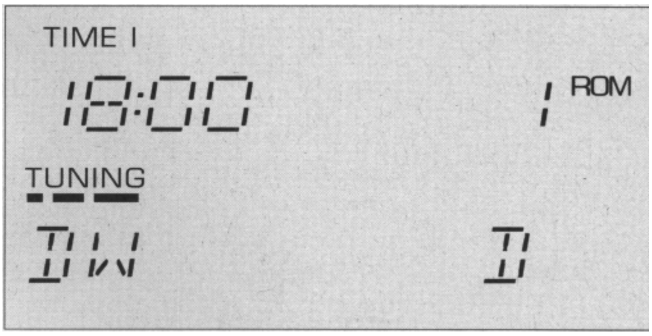
For detailed information about programmes, broadcasting times, and eventually changed frequencies, please contact the respective radio stations.

We are sure that, with this ROM table, we have placed a means at your disposal which offers you the possibility of quickly and securely tune to worldwide operating SW Stations, even if you have only little experience in short wave reception.

Calling Up ROM Table Memory Locations

For calling up stations stored in the ROM table, you must enter the code number (station code) given in the list below. This means that you must always enter a zero followed by the number and confirm the entry by pressing the MEMORY button (6).
If you have already called up the ROM table, you can select further stations with the MEMORY button (6):
Brief pressure = you get to the next higher station code.
Long pressure = you get to the next lower station code.
For all radio stations, several alternative frequencies have been programmed. You get to these alternative frequencies with the MONO/ROM-AF button (21). Each short pressure on this button will switch to the next frequency.
A direct frequency entry via the numeric keypad (also when changing the waveband) or a frequency change does not yet cause the exit from the ROM table.
If you have meanwhile changed the frequency, pressing the MEMORY button (6) brings you back to the starting point of the ROM table.
You can quit the ROM table by selecting a station memory location (e.g., 1 MEMORY) or by slowly pressing the 0/ROM numeric button which causes in addition the transfer into the tuning memory.





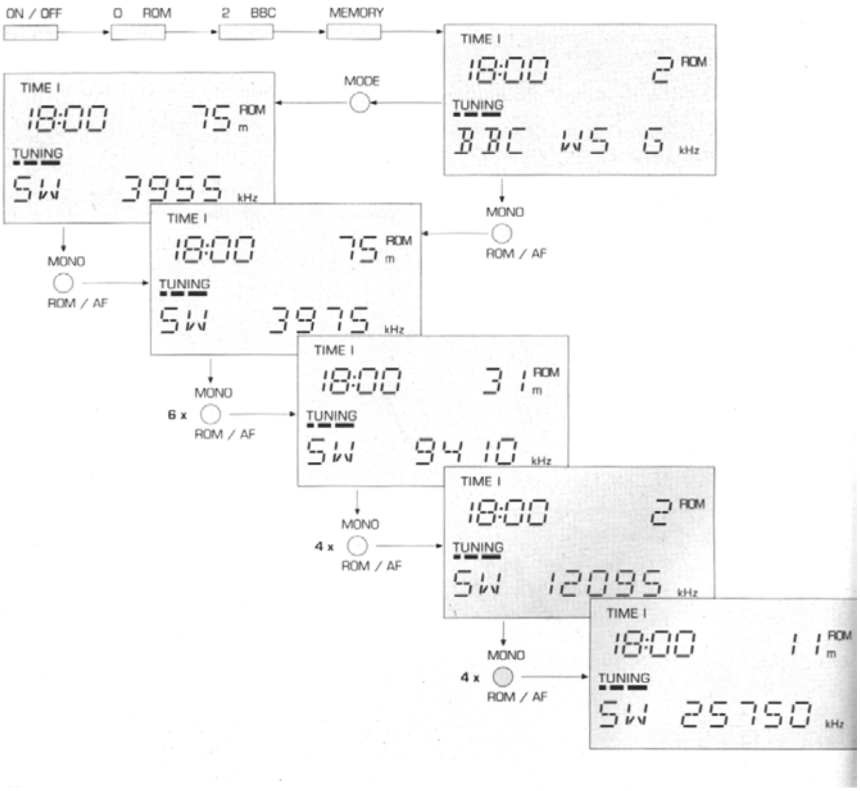
Code	Station abbrev.	Station	Frequencies (kHz)
01	DW . . . . . D	Deutsche Welle	3995, 6075, 9545, 9735, 11795, 13780, 15270, 15275, 15350, 15410, 17845, 17860, 21540, 21560, 21640, 21680
02	BBC . WS . G	BBC London External Services	3955,*3975,*5975, 6045, 6180, 6195, 7325, 9410, 9750,*9760,*9915,12095,15070,17640, 17705, 25750
03	ROEI . AUT	Radio Austria International	5945,6155,9870, 13730, 15410, 15430, 15450, 21490
04	SRI . . SUI	Swiss Radio International	3985,6165,9535, 9885, 11955, 12030, 15570
05	REND . HOL	Radio Nederland	5955,6020,9860, 9895, 13700, 15560, 17575, 17605
06	RFI . . . . F	Radio France Internationale	3965,6175,7135, 7280, 9790, 11705, 15300, 17620
07	RAI I	Radiotelevisione Italians	5990,6060,7175, 7275, 7290, 9515, *9575,* 9710
08	RMWS.RUS	Radio Moscow	5905,5915,7360, 9880, 12010, 13710, 15140, 15225, 15540,17645, 17850, 21725
09	REE . . . . E	Radio Exterior de Espana	7105, 9685, 9875, 12035, 15365, 17715, 17890

Step by Step into the World of Shortwave Reception

1. Insert batteries or connect the AC (mains) unit.
2. Extend the telescopic aerial (3).
3. Switch the unit on with the ON/OFF button (11) .
4. Adjust the volume with the VOLUME slider control (7).

For your first experience with SW reception, proceed step by step as shown below

On which frequency(ies) you then can receive, for example, BBC London, depends on the time of day.
Select "your" frequency(ies) out of the 16 preprogrammed frequencies.
Please note:
Beside the indications given in the example, no further indications should be visible in the display.
The time indication (TIME I/II) is meaningless in this case



Tuning to Stations with the TUNE A/V buttons

- Switch the unit on with the ON/OFF button (11) .

- The frequency tuned to appears in the display, on FM in MHz, on AM in kHz.
- A separate tuning memory is provided for each waveband.

1. Frequency Tuning in the FM Band
   - Select the FM waveband.

   - You hear the station last received in the FM band.

   - You tune to the desired station by briefly pressing one of the buttons TUNE △ or TUNE ▽ (19). Each pressure on the button changes the tuning frequency by 25 kHz.
   - A longer pressure on one of the buttons TUNE △ or TUNE ▽ (19) starts the automatic station search.

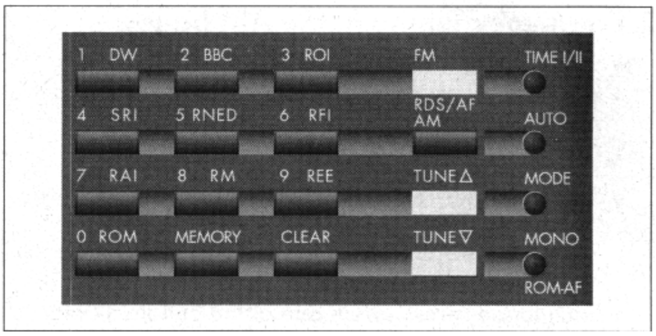
   TUNE ▽ =the search is started in direction of lower frequencies.

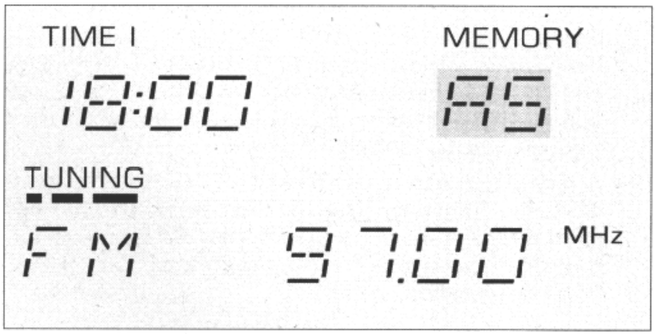
   TUNE △ =the search is started in direction of higher frequencies.

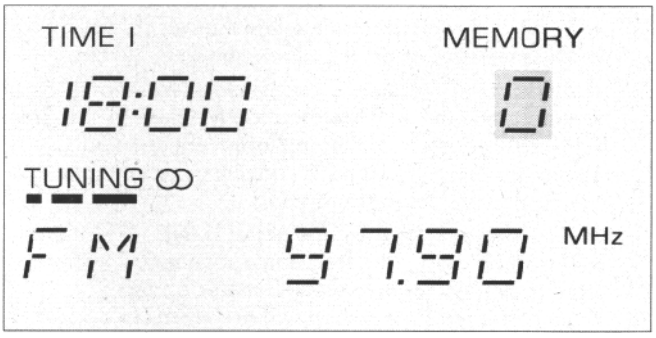
   - The station search operates in the 100 kHz mode.
   - The display (4) indicates AS (Auto-Search) = automatic station search.

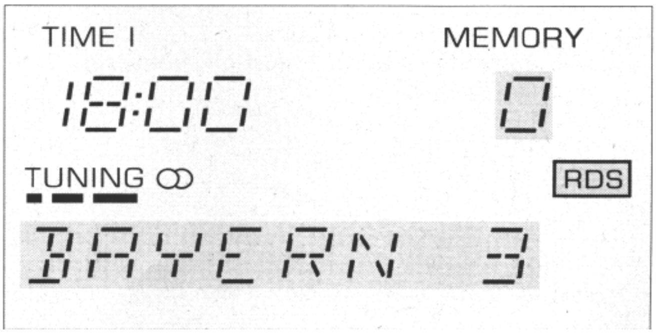
The automatic station search will stop as soon as it has found a station appropriate for good reception. It then can be restarted by a longer pressure on one of the TUNE △/▽ buttons.

If the found station is an RDS station, the RDS symbol and the station name (see "Special Functions on FM") will be displayed after a few moments. In addition, the display (4) indicates O for the tuning memory, and you will hear the station.









2. Frequency Tuning in the AM bands

- Select one of the AM bands.

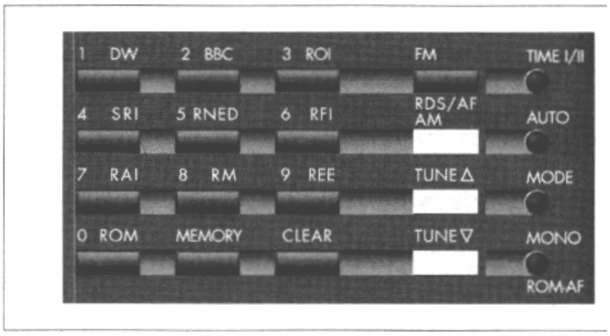
- You will hear the station last tuned to in the respective AM band.

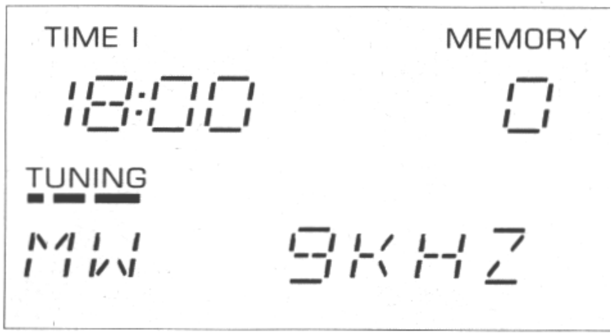
MW and LW

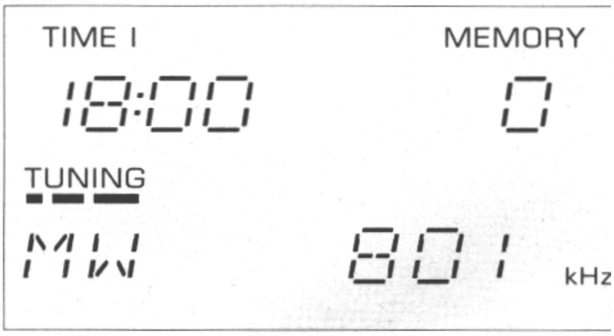
- Tune to the desired station by brief pressures on one of the buttons TUNE △ or TUNE ▽ (19). Each pressure on one of the buttons changes the tuning frequency by 1 kHz.
- Each longer pressure on one of the buttons TUNE △/▽ increases or decreases the frequency tuned to by 9kHz (on MW, this can be changed to 9/10kHz via the menu).
- If a frequency lying outside of the frequency raster has been tuned to before pressing one of the TUNE △/▽ buttons, the unit automatically tunes to the next raster frequency in the respective direction.
- A very long pressure on one of the TUNE △/▽ buttons starts the frequency scan (station search) in the desired direction. Each frequency then will be heard for approx. 1 seconds. Pressing a random button will abort this function.

SW

- A longer pressure on one of the TUNE △/▽ buttons will step 5 kHz down or up within the selected m-band. In the amateur bands, the tuning mode is 1 kHz.
  If the current frequency lies beyond the limits of a meter band, the unit automatically tunes to the limit (cut-off) frequency of the next adjacent m-band. When the end of a band is reached, the unit jumps to the beginning of the same band.
  A very long pressure on one of the TUNE △/▽ buttons will start an automatic frequency scan in 5/1 kHz steps up or down within the selected meter band. Each raster frequency then will be heard for approx. 1 seconds. Pressing a random button will abort this function.
- Long pressure on the AM button: Switching to the lower limit (cut-off) frequency of the following m-band.







The display (4) indicates 0 for tuning memory and you hear, the station.

Tuning to Stations with the Numeric Buttons
(Direct frequency entry)

For this, you must know the frequency of the station you wish to tune to. You can find these frequencies in station tables or radio guides. You can enter the desired frequency in MHz or kHz, or as m-band in the case of SW stations.

- Confirm each entry wit the buttons FM/RDS-AF for FM or AM (17) for LW, MW and SW.
  On FM: MHz indication
  On AM: kHz indication

Examples:

desired frequency	entry order
99.00 MHz	99 → FM/RDS-AF button
99.00 MHz	990 → FM/RDS-AF button
99.00 MHz	9900 → FM/RDS-AF button
99.00 MHz	991 → FM/RDS-AF button
99.00 MHz	9910 → FM/RDS-AF button
99.00 MHz	99100 → FM/RDS-AF button
7000 kHz	7000 →AM button

Entering a Meter Band

Entering a Meter Band on SW
Entered numbers below 100 with subsequent confirmation by the AM button (f~ will be recognized as wavelength in meters for SW
When the entry is valid, the set will tune to a frequency next to the band centre in the case of radio bands, and to the beginning of the respective SW band in the case of amateur bands.
See table to the right.
It is possible to enter the following meter bands
10, 11, 12, 13, 15, 16,17, 19, 20, 22, 25, 30, 31, 40, 41, 49, 60, 75, 80, 90.
Entry example for the 49-m band:
Numeric buttons 4 9 Button AM → 6075 kHz
(= Deutsche Welle).
Indication of the actual band on SW

- With direct band entry or with SW frequency scanning (within a meter band): The selected band is permanently indicated.
- With direct frequency entry or manual tuning: If the frequency tuned to lies in one of the above listed meter bands, the band will permanently be indicated in the display, if not, the display indicates 0.
- It is possible to briefly (approx. 4 seconds) indicate the m-band by pressing the MODE button.

Band Band(m)	Lower cut-off frequency (kHz)	Radio station or band centre
90-m-tropic	3200	3300
80-m-amateur	3500	
75-m-radio	3950	*3975*
60-m-tropic	4750	4905
49-m-radio	5950	6075
40-m-radio	7000	
41-m-radio	7100	7220
31-m-radio	9400	9635
30-m-amateur	10100	
25-m-radio	11650	11845
22-m-radio	13600	13700
20-m-amateur	14000	
19-m-radio	15100	15320
16-m-radio	17550	17705
17-m-amateur	18065	
15-m-amateur	21000	
13-m-radio	21450	21690
12-m-amateur	24890	
11 -m-radio	25650	25820
10-m-amateur	28000	

* Not all radio stations are broadcasting 24 hours a day and during all seasons programmes on this frequency. For this reason, please note the individual broadcasting times.

What can You Store?

You can programme up to 40 station memory locations in random order, also mixed from the 4 wavebands FM - MW -LW-SW.
You can store in memory each frequency you have tuned to.
The associated operating states (mono/stereo, LSB/USB) are automatically stored with the frequency.
On each station memory position, you can store in addition - even at a later date - an alphanumeric abbreviation (e.g., station name) of up to 8 positions.
With FM-RDS stations, the station name is automatically displayed and transferred into the respective station memory location when storing the station.

Is the Frequency Tuned to Already Stored in Memory?

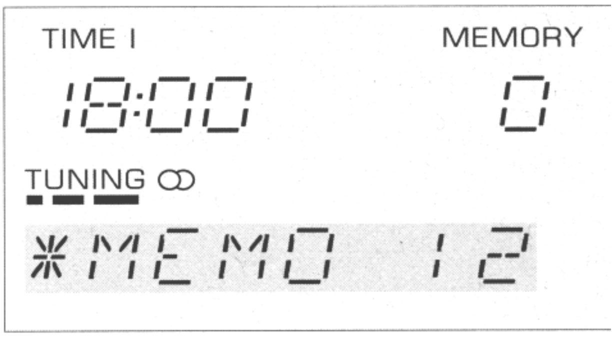
Store Compare

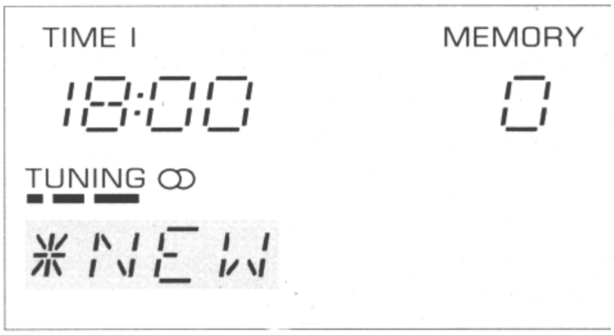
- Before storing a frequency tuned to in memory, you can check whether this frequency is already stored, by briefly pressing the STORE button.

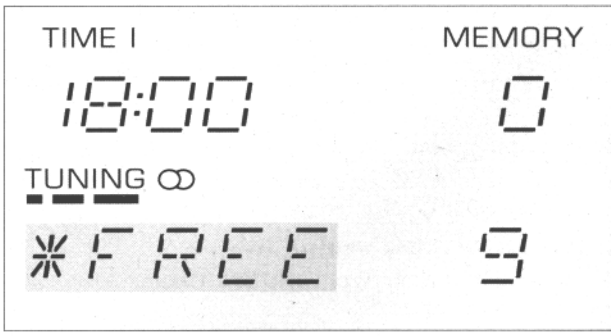
- If the station is already stored in memory, the display indicates the station number (e.g., ∗ *MEMO 12).* If you press the STORE button once again or keep it pressed while this indication is visible, all further stations with this frequency will be indicated.
- If the station is not yet stored in memory, the indication ∗ NEW appears in the display.

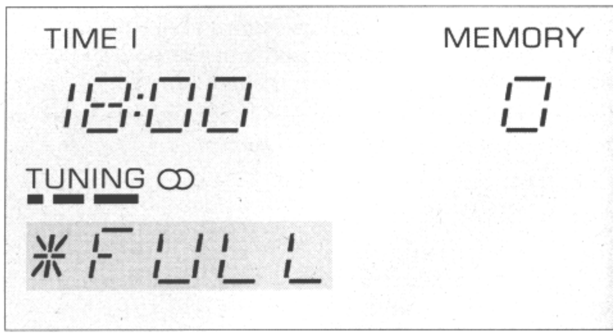
- A long pressure on the STORE button will indicate the free memory positions (e.g. ∗ FREE 9). If you press the STORE button once again or keep it pressed while this indication is visible, all free memory locations will be indicated.

- If all locations of the station memory are occupied, the indication ∗ *FULL* will appear in the display.







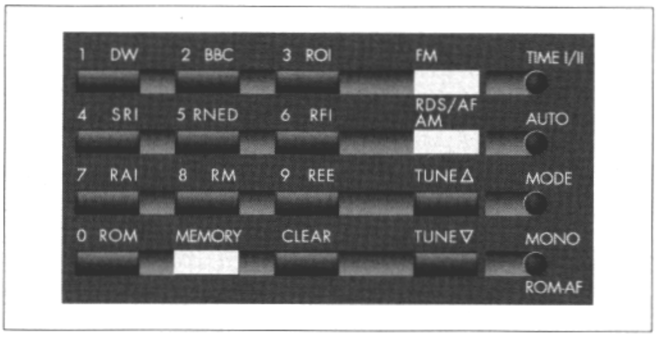


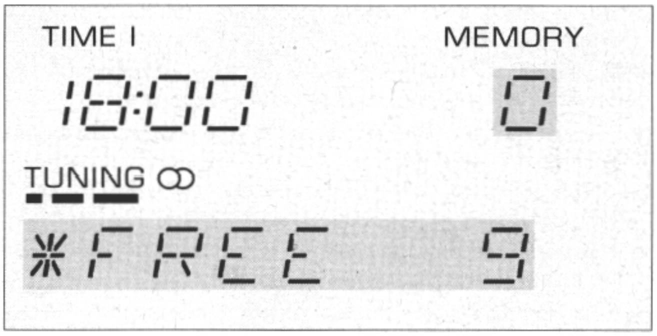
Checking the Desired Station Memory Position

To avoid accidentally erasing an already stored station be, you can call up the memory location you wish to use and check it before you store it in memory. When doing this, the station to be stored remains in the tuning memory (0 in the display)

- Enter the number of the station memory location with the numeric buttons.
- Press the MEMORY button.
  The display then indicates either ∗ *FREE* (not occupied) or, if a station has already been programmed, the number of the station memory location and the frequency or the name of the station.
  The station last tuned to in the respective waveband remains always "buffered" on the numeric button "0".
- It is then eventually necessary to press the AM button several times or to switch to FM to return to the desired waveband.

Then retrieve the station by pressing the numeric button "0" and the MEMORY button, and search a different station memory location.



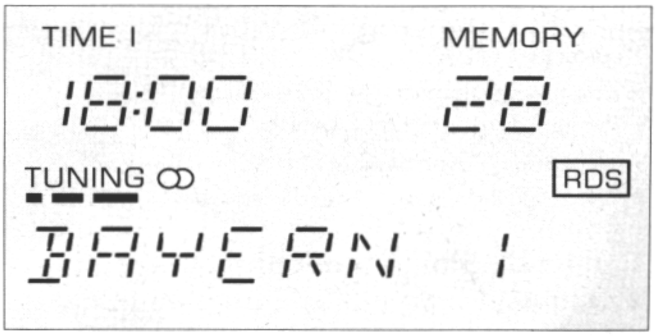


Programming a Station Memory Location

Overwriting the old memory contents.

- Tune to the desired station.
- Enter the number of the desired memory location with the numeric buttons.
- Press the STORE button a long time.

- The number of the selected memory location appears below the indication MEMORY in the display. You will still hear the stored station.
- A station name which you have entered or which has been decoded by the RDS system and which is visible in the display will be stored along with the frequency.



Entering Abbreviations

(e.g., station name)

On each station memory location (1 ... 40), a station name (up to 8 positions) which then is indicated in the display can be programmed along with the frequency. This is possible either when storing the frequency or at a later date. Examples for station names are WARSAW, HELSINKI, BUDAPEST, etc...

- The entry is initialized with the A - Z button.
- If the hint ∗*RDS* or ∗ *ROM TAB* appears after having pressed this button A - Z, entry of the abbreviation is inhibited.
- If entry of the name is possible, the radio will continue to play on the chosen station. The cursor will flash at the left in the display.
- The TUNE △/▽ buttons allow you to enter letters (A-Z), figures (0-9), and several special characters.
- Each pressure on the A - Z button moves the cursor one position to the right for entering the next character. A longer pressure on the button moves the cursor to the left thus allowing you to correct a wrong entry.
- If you wish to enter spaces or less than 8 positions, use the blank character (between 9 and A).
- After having entered the last position, press the A - Z button once again. The cursor disappears and the entry is allocated the station memory location.
- When pressing the A - Z button once again, the cursor reappears at the first position, and you can, for example, correct the entry.

Exiting this function with the CLEAR button:

- The entry is not stored in memory.

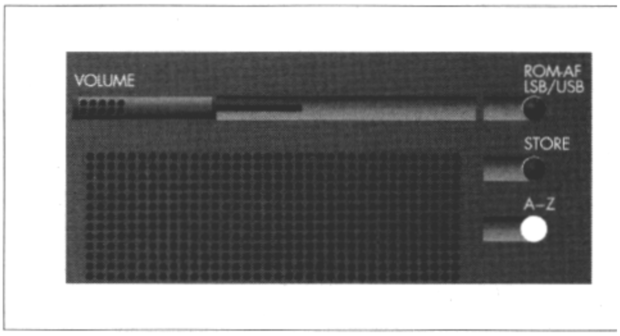
When surpassing the timeout of > 15 seconds:

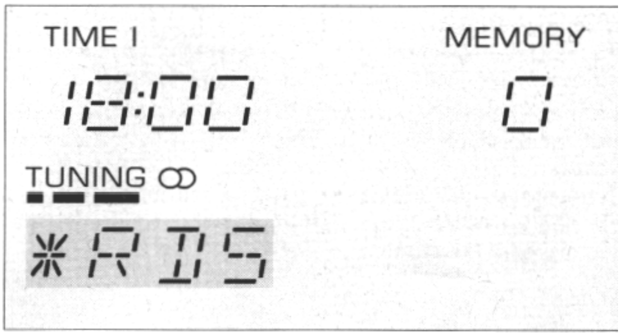
- The actual entry is automatically stored in memory.

Calling Up Stored Stations

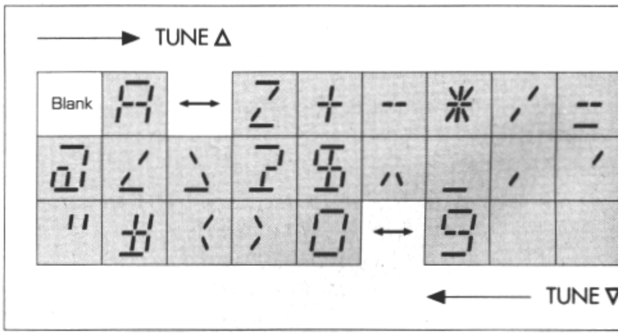
- Enter the number of the desired station memory location with the numeric buttons.
- Press the MEMORY button.

- If the called up memory location is not programmed with a station, the indication ∗ *FREE* appears for approximately 2 seconds in the display.
  You will still hear the station tuned to before.
- When calling up stored stations with the numeric buttons, the unit automatically switches to the correct waveband (Intermix function).



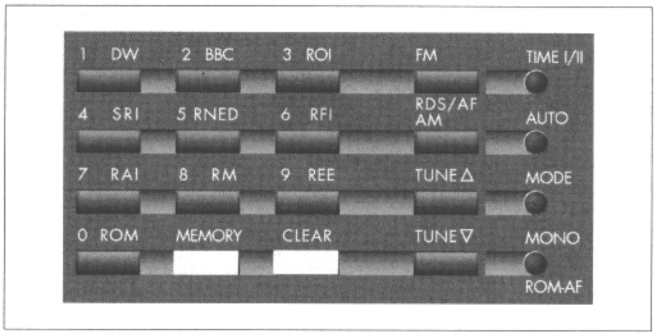


Special characters



The MEMORY Button (Memory Scan)

This button allows you to call up occupied memory locations one after the other:
Brief pressure on the button = memory location numbers up, longer pressure on the button = memory location numbers down.
The next possible memory position location is called up and its name is indicated if it has been entered or if it is received via the RDS system.
Unoccupied memory locations are automatically skipped.



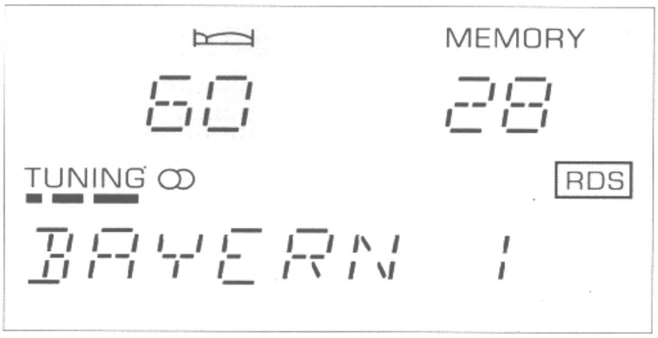
Clearing an Occupied Memory Position

- A very long pressure on the CLEAR button will clear the actual station memory location.

The display indicates ⁎ *FREE* and the station number.



Going to Sleep to Radio



The SLEEP button allows you to enter a "go-to-sleep time" (time the radio will still play) of up to 60 minutes.

- Press the SLEEP button. -

The unit is switched on.

- Repeated pressures on the SLEEP button increase the playing time in 10-minutes steps (up to 60 minutes). Indication: 10, 20, 30, 40, 50, 60, 10, 20, etc...
- A longer pressure on the button increases the playing time automatically in 10-minutes steps.

- The display indicates the symbol and the entered "go-to-sleep time".
- When this time has elapsed, the unit automatically switches off and the indication disappears.

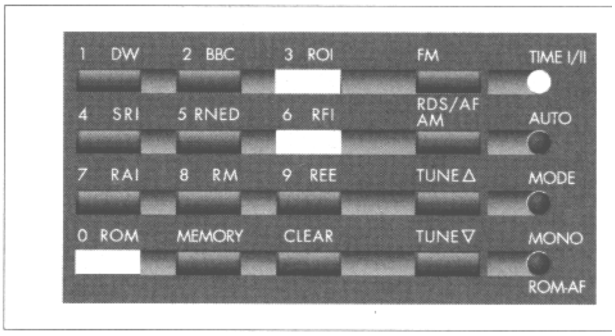
Checking the playing time:

- Briefly press the SLEEP button. The display indicates the time remaining until the unit is automatically switched off.

Premature erasure of the playing time:

- Switch the radio off with the ON/OFF button or press the SNOOZE button.

- The timeout (period during which you must complete each entry) of approx. 60 seconds applies also for the clock.
- You can enter times whether the radio is switched on or off.
- You can enter clock times and switching times in several different ways.



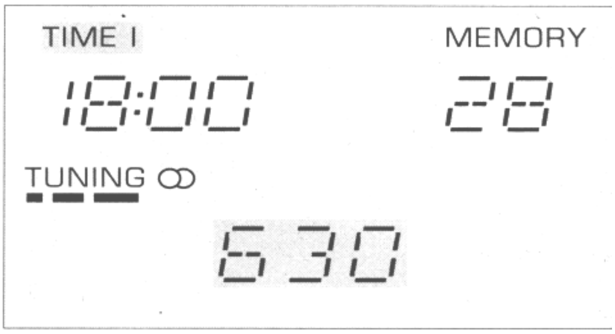
Examples:	Entry sequence
Clock time	630
1 st example: Clock time 6.30	0630
2nd example: Clock time 15.00	15
	1500
3rd example: Clock time 0.15	015
	0015

Setting the Clock

(TIME I/Clock time I) with the help of a reference clock.
Example TIME 1: 6.30 hours:

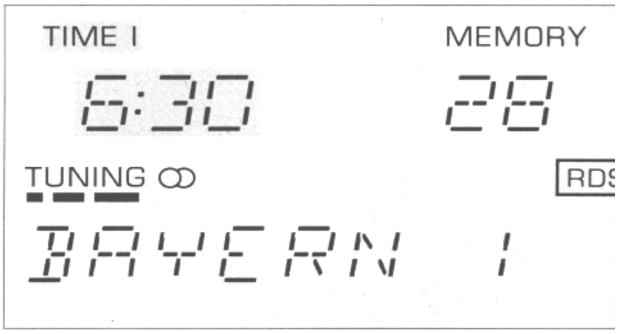
- The display must indicate TIME I.
- Enter the clock time with the numeric buttons.
- Press and hold down the TIME I/II button until the reference clock jumps from 6.29.59 to 6.30.00.

- As soon as you release the TIME I/II button, the clock starts running right on the dot and the colon between the hours and the seconds indication will flash.



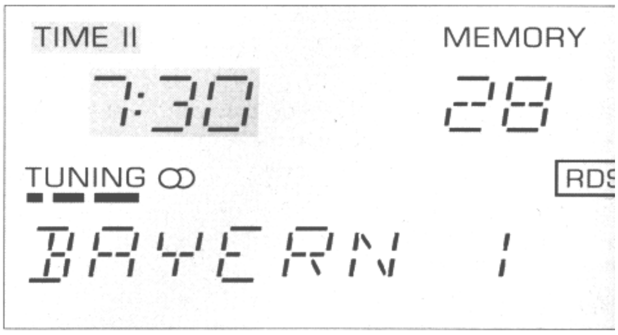
Setting the Clock

(TIME II/Clock time II).
For setting TIME II/Clock time II proceed in the some way, with the only difference that the display must indicate TIME II.
As the seconds of clock time II run synchronously with clock time I, you must not wait for the minutes change-over in this case.



Clock Time Indication TIME I/II

- Repeated pressures on the TIME I/II button (without preceding number entry) will switch between the two clock time indications.



For the function "wake-up by the radio programme", you can enter two independent switch-on and switch-off times. Each switch-on time can be assigned to a different radio station.
For example, you can let your radio switch on to your favorite station by the switch-on time 1.
If you wish then to hear a programme (e.g., the latest news) broadcasted by a different station after switching on by switch-on time 1, select this programme with switch-on time 2 and switch-off time 2.
When the switch-on time 2 then is reached, you will hear the desired station until the radio is turned off by the switchoff time 2. Then the radio continues playing your favorite programme until the switch-off time 1 is reached.
Please note ...
if both switching times are programmed and overlap each other:
- Switch-on times have always priority over switch-off times.
- The second switching times have priority over the first switching times.

Already programmed stations are not affected by time programming.
The switching times always refer to the times indicated in the display (TIME I or TIME II).
An example for better understanding:
You have programmed the local time (e.g., CET or CEST) as TIME I.
TIME II stands for a second time zone (e.g., Greenwich Mean Time/GMT).
You have entered 14.00 hours as switch-on time and set the radio to "AUTO".
If then the display indicates TIME I, the radio will be switched on at 14.00 hours local time;
if the display indicates TIME II, the unit will be switched on at 14.00 hours of the second time zone.

Programming Switching Times Switching Times 1/2

- Switch the radio on.
- Select the menu item ON 1 (switch-on time 1).
- Use the numeric buttons 0 ... 9 to set the desired switchon time and confirm the entry with the TIME I/II button. The switch-off time is automatically set so that one hour playing time is obtained.
- Enter the number of the desired station memory location with the numeric buttons then press the MEMORY button.
- Repeatedly press the MODE button to select the desired wake-up (alarm) mode:

N) n= wake-up by radio programme. You hear the selected station.
U4= wake-up (alarm) by alarm signal. The radio station

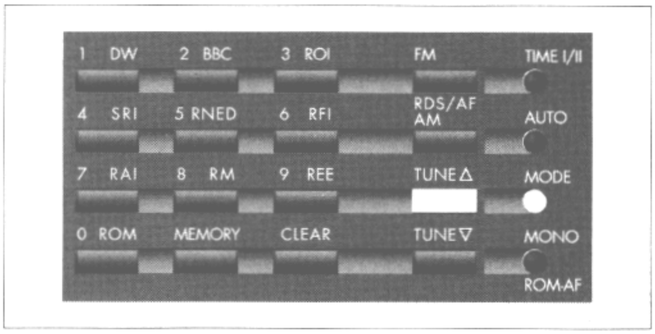
- Repeatedly press the MODE button to select the desired wake-up (alarm) mode:

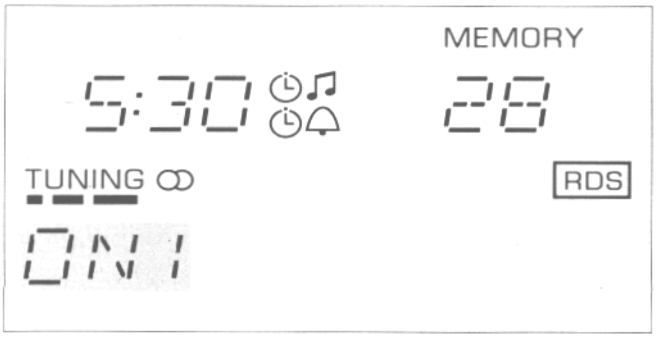
= wake-up by radio programme. You hear the selected station.

= wake-up (alarm) by alarm signal. The radio station is muted and an alarm signal sounds instead.

and = wake-up by alarm signal and radio programme. You hear the radio programme and the alarm sound signal.

- Use the TUNE A button to select the menu function OFF 1 (switch-off time 1).







- You can enter a switch-off time of your choice with the numeric buttons and the TIME I/II button. However, this does not apply for the "wake-up by sound signal" function.

- Use the TUNE A button to select the menu function ON 2.
- Press the CLEAR button to quit the menu (the entered data will be stored in memory).
- For ON 2/OFF 2 applies the same as for ON 1 /OFF 1.

Checking the Switching Times 1 /2

- When you have selected the menu functions ON 1 or ON 2 and OFF 1 or OFF 2, you can indicate in the display the switch-on time, the station memory location, the alarm (wake-up) mode, and the switch-off time by pressing the TUNE A/V button.

Automatic Switching On and Off

- The AUTO button allows you to switch on and off the automatic functions.

1. With radio programme

- The alarm mode or must be selected.
- Enter the desired switching times.
- Tune to the desired station or select the desired station memory location and adjust the appropriate volume.
- Press the AUTO button to enable the automatic function.

- The radio is switched off if the current time does not lie within the programmed automatic time period.
- The following indications are then visible in the display: TIME I or TIME II
Clock time
Alarm mode and/or
Switch-on time

- If you have selected no alarm mode, a hint with the error message *L TIMER* will appear when pressing the AUTO button.
- It is of course possible to switch the radio on and off with the ON/OFF button so that you can listen to the radio also at times which are not lying within the automatic switching period.
- If 2 switching times are programmed, the display will indicate the next switch-on time.

- At the programmed times, the radio will automatically be switched on and off.

Prematurely switching off the radio:

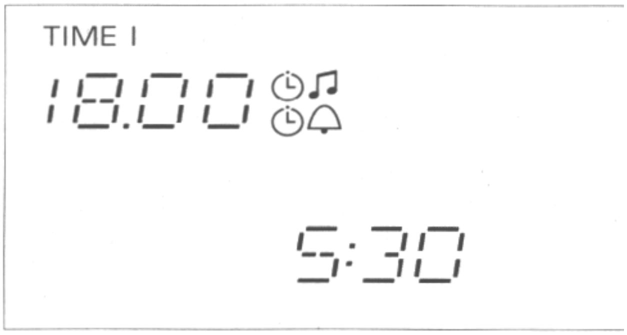
- Press the ON/OFF button.

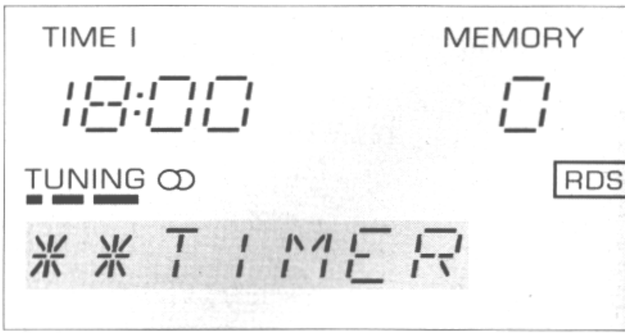
- The entered switching times are retained.

2. With alarm sound signal

- The alarm mode or must be selected.
- Enter the desired switch-on time.
- As the alarm signal has a fixed duration of 5 minutes, it is not necessary to enter the OFF time.
- Press the AUTO button. If the radio is switched off, the following indications an visible in the display:
TIME I or TIME II
Clock time
Alarm mode and/or
Switch-on time

- At the programmed time, the alarm signal will sound for 5 minutes max.



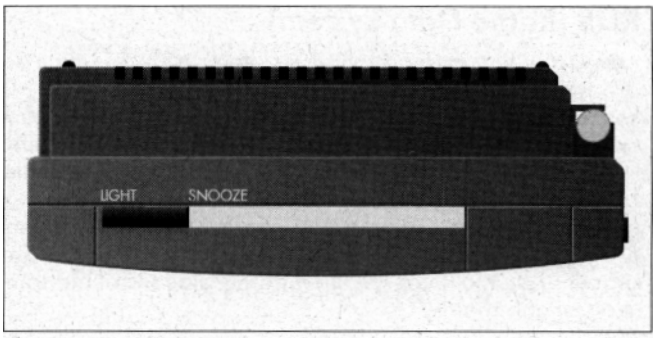


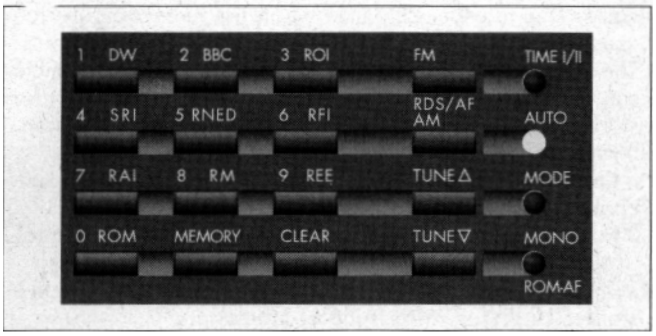
Automatic Functions

- Briefly press the SNOOZE (2) button
- The alarm sound signal will be interrupted for approx. 5 minutes.
- The symbol will be indicated.
- This function can be repeated as often as desired.
- Press the SNOOZE button a long time.
- The alarm signal will prematurely be switched off (for 24 hours).
- The programmed switching times are retained. 3. With
alarm sound siqnal and radio proqramme
- The functions "wake-up by radio programme" and "wake-up by alarm sound signal" can be combined.
- Enter the alarm times as described under paragraphs 1 and 2.

Switching Off the Automatic Functions
- Press the AUTO button.
- The alarm mode indications must disappear.
- The programmed switching times are retained.

Timer Recordings
If you possess a cassette recorder with start/stop remote control facility, you can use the switching times of the radio to switch on and off the cassette recorder for recording radio programmes.
Proceed as follows:
- Connect the output switch jack (29) with the switch jack of the cassette recorder.





Automatic Control of a Cassette Recorder
For this, you require an appropriate connecting cable. Please contact your specialized dealer or the GRUNDIG After-Sales Department.
To make recordings with the cassette recorder, the LINE OUT socket(* of the radio must be connected with the LINE IN socket of the cassette recorder.
- Switch the cassette recorder to recording-start. When the Yacht Boy 500 is automatically switched on, the cassette recorder is also automatically started and records the programme broadcasted by the selected station.

Special Functions on FM

RDS (Radio Data System)

RDS is a digital information system, the signals of which are broadcasted in addition to the FM radio programme. Your radio is equipped for operation with this information system. It evaluates the codes for programme identification (PI), programme service (PS), and alternative frequencies (AF).

It is thus possible for the radio to indicate the name of the programme chain (stations broadcasting the same programme) and to compare the different stations of the same programme chain.

To ensure a correct decoding of the RDS signals, certain demands are made on the reception quality of RDS broadcasts. This is especially true when the telescopic aerial is used for reception.

The first condition for correct RDS reception is a sufficient signal strength. This means that the TUNING (field strength) indication should reach its maximum deflection. A further condition is the indication of the RDS sign. If these two conditions are met, the name of the programme chain will be indicated within 10 seconds. If this should not be the case, decoding of the RDS signal is probably impaired by multipath reception (reflections). In most cases, this distortion is not signalled through an unstable TUNING (field strength) indication. At the most, the RDS indication might be unstable. In technical jargon, this effect is called

The RDS reception quality is insufficient.

A special function of your unit enables the indication of the RDS reception quality.

Pressing the LSB/USB button © switches the eight-position alphanumeric indication to the RDS quality indication:

Q ....

Try to improve the RDS reception quality by changing the position of the telescopic aerial (tilt and/or rotate). This means that as many segments as possible should be indicated. The figure shows the maximum possible number of 16 sensitivity grades (vertical bars).

This indication corresponds to 100 % RDS reception quality (respectively 0 % error rate).

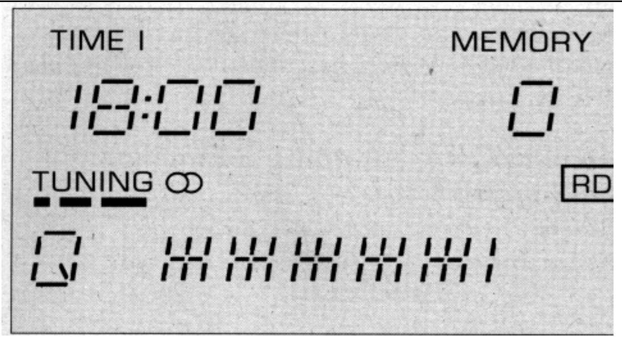
Especially when operating the radio inside a building, the location of the radio can be of great importance for the RDS reception quality. If necessary, try to install the radio at a location giving better results.

The RDS-Q special function remains effective for approx. 1 minute and then automatically switches to the indication of the programme chain name. It is also possible to switch the RDS-Q indication to the programme chain name indication by pressing the LSB/USB button once again.

Please note:

The indication of the programme chain name is only effected if the RDS reception quality is sufficient, and the indication of the RDS quality is only possible if the RDS sign is indicated too.

Calling Up Alternative Frequencies (AF)



If the RDS sign and the programme chain name are both indicated, you can call up the alternative frequencies of this programme chain.

Pressing the FM/RDS-AF button starts scanning of t broadcasted alternative frequencies.

During this function, the indication AF appears in the display (4).

The individual frequencies are then checked for their field strength (worthy of reception or not). If the field strength suffices for correct RDS reception, scanning is aborted. The respective frequency is indicated and the unit switches off the muting function which has been activated at the beginning of the scan (call-up) function. If none of the alternative frequencies is worthy of reception the radio tunes to the initial frequency again.

Hint

Short pressure on the FM/RDS-AF button =

the alternative frequencies are indicated in increasing order.

Long pressure on the FM/RDS-AF button =

the alternative frequencies are indicated in decreasing order

Special Functions on AM

SSB (Single Side Band) Reception on SW

... is an additional function to "normal" radio reception.

- Switch the radio on and select a SW amateur band (SSB stations are mainly broadcasted on these bands).
- Set the TONE switch (26) to SPEECH.
- Use the TUNE △/▽ buttons (19) to slowly scan the band step by step for SSB stations.

When doing this, please note that the carrier is suppressed on SSB broadcasts.

This means that reception is only possible when the transmitter is actually broadcasting a programme (mostly in speech). During pauses, no tuning is possible. The TUNING indication is of great help when searching SSB stations.

The TUNING indication deflects in the rhythm of the speech (modulation) when an SSB station is received.

- As soon as a station is found - the speech is still unintelligible - select the lower or upper side band with the stepping button LSB/USB (22).

Tune to best intelligibility with the FINE TUNING control (12).

If you wish to terminate SSB reception, do not forget to switch back to "normal" AM radio reception

- Repeatedly press the LSB/USB button until the LSB/USB indication disappears.

Interferences

- If there are interferences on the AM (MW, LW, SW) bands, you can optimize reception with the FINE TUNING control (12).

